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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

WONG, WARNER

ART UNIT

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2616

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DELIVERY MODE

04/15/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/960,008	Applicant(s) MORALES ET AL.	
	Examiner WARNER WONG	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4,8,9,12-18 and 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8,9,12-18 and 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 3, 8, 33, 35 and 37 are rejected under 35 U.S.C. 102(b) as being anticipated over Gilhousen (US 5,697,055).

Regarding claim 1, Gilhousen describes a method for performing wireless communications between base stations, comprising:

communicating bearer traffic for a packet-switched communication session between a mobile station and a first base station (BS) associated with a first type of wireless system (fig. 1 & col. 6, lines 58-65, MS 18 sets up call with BS 16);

determining if handoff is required from the first base station to a second base station (BS) associated with a second, different type of wireless system (title, col. 7, lines 9-14 & col. 8, lines 31-34, handoff to another base station of different air interfaces/cellular system);

in response to determining that the handoff is required, sending a message from the first base station to the second base station over an interface between the first base station and second base station, the message indicating to the second base station that handoff is required (col. 7, lines 15-28, sending the message from base station 16 to

base station 12 via link (interface) between MSC I & MSC II of different cellular systems as depicted in fig. 3 & col. 8, lines 31-34).

Regarding claims 3 and 8, Gilhousen describes:

the first BS comprises an IS-2000 base station and wherein communication the bearer traffic comprises communication the bearer traffic between the mobile station and the IS-2000 base station (col. 8, lines 32-33, communication with the first system/BS may be CDMA, i.e. CDMA-2000, which is IS-2000).

Regarding claim 33, Gilhousen describes:

the MS comprises a hybrid MS that is able to support at least two different wireless communications protocols including a first wireless communications protocol and a second wireless communication protocol (col. 7, lines 9-14 & 31-36, mobile capable of transceiving different wireless (air) protocols);

wherein determining if the handoff is required from the first base station to the second base station comprises determining if the handoff is required from the first base station that communicates with the hybrid mobile station according to the first wireless communications protocol, to the second base station that communicates with the hybrid mobile station according to the second wireless communication protocol (col. 7, lines 9-14 & 31-36).

Regarding claims 35 and 37, Gilhousen and Bender combined describes: the mobile station comprises a hybrid mobile station that is able to perform wireless communications according to both the first and second protocols, the controller to communicate the bearer traffic with the hybrid mobile station (col. 7, lines 9-14 & 31-36).

2. Claims 4, 7, 9, 12-15, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dolan as applied to claim 1 above, and further in view of Bender (US 2006/0148511).

Regarding claim 4, Gilhousen describes a handoff determination between the first type of BS exemplified as a CDMA BS to a second type of BS as set forth in claim 3, but fails to describe that the second type of BS may be an HDR/1xEV BS.

Bender also describes the forwarding the mobile's messages/communication, particularly from a CDMA (IS-2000) BS to a HDR (i.e. 1xEV) BS (fig. 1, paragraph 44) which may be for an handoff (paragraph 30).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to specify that the second type of BS of Dolan being a HDR/1xEV type as in Gilhousen.

The motivation for combining the teachings is that it is highly desirable to forward messages from one type of radio-communications to another (Bender, paragraphs 7, 9).

Regarding claim 9, Gilhousen and Bender combined further suggest: the handoffs determination may be from a HDR/1xEV BS to a 1xRTT BS (Bender, fig. 1, paragraphs 7 & 9, message forwarding is understood to be to CDMA (i.e. 1xRTT) radio network from HDR radio network 122).

Regarding claim 12, Gilhousen and Bender combined further describe sending another message from the second BS to the first BS to initiate a handoff procedure (Gilhousen, col. 5, lines 59-65, the incorporated CDMA techniques already comprises

CDMA call handoff procedure, which describes the handoff messages sent between the first BS and the second BS. The examiner also cites but not used as a reference "IS-95 CDMA and cdma-2000", by Vijay K. Garg, Prentice Hall © 2000, which details CDMA handoff messaging between base stations.)

Regarding claim 13, Gilhousen and Bender combined further describe sending a further message from the first base station to the second base station to indicate that the mobile station has been directed to hand off to the second base station (Gilhousen, col. 5, lines 59-65, the incorporated CDMA techniques already comprises CDMA call handoff procedure, which describes the handoff messages sent between the first BS and the second BS. The examiner also cites but not used as a reference "IS-95 CDMA and cdma-2000", by Vijay K. Garg, Prentice Hall © 2000, which details CDMA handoff messaging between base stations.)

Regarding claim 14, Gilhousen describes that the message comprises sending the message over a link between the first BS and the second BS (fig. 2, via link 34).

Regarding claim 15, Gilhousen describes: performing a hard handoff between the first base station and the second base station (col. 11, lines 46-50).

Regarding claims 36-38, Gilhousen and Bender combined describe:

the first protocol comprises a 1xEV protocol, and the second protocol comprises a 1xRTT protocol (paragraphs 30 & 44).

3. **Claims 30-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Gilhousen and/or Bender as applied to claims 1, 16 and 24 respectively, and further in view of Dolan (US 2002/0057653).

Gilhousen and Bender combined fails to explicitly describe a link directly connecting the first base station and the second base station for sending messages.

Dolan describes: a link directly connecting the incompatible first and second base station for sending messages (fig. 3 & 7 and paragraph 38, direct connection 305 between base stations for data exchange).

It would have been obvious to one with ordinary skill in the art at the time of invention by applicant to incorporate a direct link between two BS's as in Dolan for the network BS's of Gilhousen.

The motivation for combining the teachings is that it improves timing for exchange of data (Dolan, paragraph 38).

Claims 16-18 and 20-23 are base station system claims drawn to the limitations deriving from method claims 1-15; hence they are rejected using the same rationale.

Claims 24-29 are article claims drawn to the limitations deriving from method claims 1-15; hence they are rejected using the same rationale.

Response to Arguments

4. Applicant's arguments filed 1/16/2008 have been fully considered but they are not persuasive.

From the last sentence of p. 8 to paragraph 2 of p. 9 and repeated in p. 9 paragraph 4, the applicants argue that Gilhousen fails to describe "any communication of a message from one base station (associated with a first type of wireless system) to a second base station (associated with a second, different type of wireless system) over an interface between the first and second base stations where the message indicates to the second base station that handoff is required." The examiner respectfully disagrees.

The examiner understands that Gilhousen describes sending an intersystem handoff messages (see title & abstract) from MSC-I & its controlling base stations of one cellular system type to MSC-II & its controlling base stations of another cellular system type (see also col. 7, lines 15-28 & col. 8, lines 31-34 in reference to fig. 3, also explained in claim 1 rejection). The appended claim limitations merely require an interface between the first and second base stations, which can be broadly met by the link/interface between MSC-I and MSC-II connecting a base station of MSC-I to a base station MSC-II. Note that only dependent claim 30 requires a "direct" link between the base stations.

On p. 10 paragraph 3, the applicants argue that the motivation in using the Dolan reference is improper.

The examiner has revised the citings within Dolan reference and its motivation for combination with Gilhousen.

On p. 10 paragraph 4, the applicants argue on that “the two protocols have nothing to do with base stations associated with different types of wireless systems that are able to communicate with a mobile station.”

This argument is irrelevant because the examiner is only using the portion of Dolan’s art about having a direct connection between two base stations.

On p. 11 paragraph 2, the applicants argue on that “the Dolan reference is inconsistent with the teachings of Gilhousen”, that “Gilhousen would lead a person of ordinary skill in the art away from use of a direct link”. The examiner respectfully disagrees.

The examiner believes that the new cited portions of Dolan reference as well as the new motivation as described in the above Office Action will lead one of ordinary skill in the art to improve on the timing for the exchange of data and allow for consistently successful soft handoffs (Dolan, para. 38).

Hence, Gilhousen and Dolan combined suggest all claim limitations set forth.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Grilli (US 2003/0002525) describing synchronization for handover between different base station types and Park (US 7,151,756) describing hand handoff between asynchronous CDMA system and a synchronous CDMA system.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Warner Wong whose telephone number is 571-272-8197. The examiner can normally be reached on 6:30AM - 3:00PM, M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kwang Yao can be reached on 571-272-3182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Warner Wong
Examiner
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